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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/604,595	06/27/2000	Paul A. Underbrink	ST97001CI2 (209-US-CIP2)	5340
34408	7590	09/15/2006	EXAMINER	
THE ECLIPSE GROUP 10605 BALBOA BLVD., SUITE 300 GRANADA HILLS, CA 91344			ODOM, CURTIS B	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/604,595		UNDERBRINK ET AL.	
	Examiner		Art Unit	
	Curtis B. Odom		2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5, 6, 8, 10, 16, 18, 20-22, 25, 26, 33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21, 22, 25, 26, 33 and 34 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 6, 8, 10, 16, 18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/22/2006 have been fully considered but they are not persuasive. On page 12 of the "REMARKS", applicant states the following:

"The Examiner rejected claims 1, 3, 5, 6, 8, 10, 16, 18, and 20 under 35 U.S.C. §102(e) as being anticipated by Kawabe et al. patent (U.S. Pat. No. 6, 377, 613, hereafter the '613 patent). The earliest priority date for the '613 patent is October 23, 1998. The present application claims priority back to issued U.S. Pat. No. 6,044,105 that has a filing date of September 1, 1998. Thus, the September filing date of the parent case predates the '613 patent's priority date. Figures 5a and 5b along with the specification of the '105 patent shows that the subject matter of the rejected claims in the present application predates the '613 patent. Therefore, the '613 patent may not be considered as prior art and the claims rejected under 35 U.S.C §102 are in condition for allowance."

However, it is the understanding of the examiner, the subject matter in the claims is not supported by U. S. Patent No. 6, 044, 105 (the parent application). Independent claims 1, 6, and 16, recite the claim limitation "selecting one of the in-phase portion and quadrature-phase portion (of a signal sample)". The claims further recite limitations based on this selection. However, U. S. Patent No. 6, 044, 105 does not support this limitation. There is no disclosure of

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selecting one of the in-phase portion and quadrature-phase portion of a signal sample and processing this selected portion. The applicant points to Figures 5a and 5b of U.S. Patent No. 6, 044, 105 for teaching of this limitation, however, Figures 5a and 5b does not illustrate selection of an in-phase or quadrature signal sample. Figures 5a and 5b illustrate selection of an even or odd sample but do not illustrate selection of an in-phase or quadrature signal sample. MPEP 706.02 [R-3], Section V, states the following:

“If the application is a continuation-in-part of an earlier U.S. application or international application, any claims in the new application not supported by the specification and claims of the parent application have an effective filing date equal to the filing date of the new application. Any claims which are fully supported under 35 U.S.C. 112 by the earlier parent application have the effective filing date of that earlier parent application.”

Therefore, it is the understanding of the examiner that since claims 1, 3, 5, 6, 8, 10, 16, 18, and 20 are new claims not supported by specification and claims of the parent application (U. S. Patent No. 6, 044, 105) that these claims have an effective filing date of 2/7/2000, wherein U. S. Patent No. 6, 377, 613 (effective filing date of 10/22/1999) used as a reference to reject these claims in Office Action 2/22/2006 predates the effective filing date of 2/7/2000.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 5, 6, 8, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawabe et al. (previously cited in Office Action 2/22/2006).

Regarding claim 1, Kawabe et al. discloses a system for despreading a spread spectrum signal using a PN code (Fig. 16, block 2581), wherein the spread spectrum signal comprises a plurality of signal samples, each signal sample having an in-phase portion and a quadrature-phase portion (column 11, lines 9-15), and wherein the PN code comprises a plurality of chips (column 11, lines 16-26), the system comprising:

a switch (Fig. 16, block 2509, column 11, lines 9-15) for selecting one of the in-phase portion and the quadrature-phase portion, wherein the multiplexer is a switch in that it switches between the in-phase and quadrature portions of the signal (see Fig. 17, 1703);

a first multiplier (Fig. 16, 2517, column 11, lines 3-27) coupled to the switch for multiplying the selected portion of one of the plurality of signal samples (I signal) with one of the plurality of PN code chips to obtain a first product (I code); and

a second multiplier (Fig. 16, 2518) coupled to the switch for multiplying the selected portion of a second of the plurality of signal samples (Fig. 17, I2) with the one of the plurality of PN code chips (Fig. 17, I-code) to obtain a second product, wherein the second of the plurality of signal samples (I2) succeeds the one of the plurality of signal samples; and

a first adder (Fig. 16, 2520) coupled to the first multiplier and the second multiplier for adding the first product with the second product to obtain a first sum, wherein the sum of products I signal x I code is accumulated (Fig. 16, II, calculation, column 11, lines 3-8 and column 11, lines 16-19).

Regarding claim 3, which inherits the limitations of claim 1, Kawabe et al. further discloses:

a third multiplier (Fig. 11, 1110-3, wherein Fig. 16 has the same structure as that of Fig. 11, see column 11, lines 16-19) coupled to the switch for multiplying the selected portion of a third of the plurality of signal samples (Fig. 17, I3 signal) with a second of the plurality of PN code chips (shifted I-code, see column 4, lines 50-65) to obtain a third product, wherein the third of the plurality of signal samples succeeds the second of the plurality of signal samples and wherein the second of the plurality of PN code chips succeeds the one of the plurality of PN code chips (shifted PN code, see column 4, lines 50-65), wherein the PN code is shifted such that correlations are obtained between each sample and each PN code chip (column 4, line 66-column 5, line 4);

a fourth multiplier (Fig. 11, 1110-4) coupled to the switch for multiplying the selected portion of a fourth of the plurality of signal samples with the second of the plurality of PN code chips (shifted I-code, see column 4, lines 50-65, wherein the PN code is shifted such that

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correlation are obtained between each sample and each PN code chip, see column 4, line 66-column 5, line 4) to obtain a fourth product, wherein the fourth of the plurality of signal samples succeeds the third of the plurality of signal samples and wherein the third of the plurality of PN code chips succeeds the second of the plurality of PN code chips;

a second adder (Fig. 11, 1111-4) coupled to the third multiplier and the fourth multiplier for adding the third product with the fourth product to obtain a second sum; and

a third adder (Fig. 11, 1111-m) coupled to the first adder and the second adder for adding the first sum with the second sum.

Regarding claim 5, which inherits the limitations of claim 4, Kawabe et al. further discloses:

a third multiplier (Fig. 11, 1110-3, wherein Fig. 16 has the same structure as that of Fig. 11, see column 11, lines 16-19) coupled to the switch for multiplying the selected portion of a third of the plurality of signal samples (Fig. 17, I3 signal) with the second of the plurality of PN code chips (shifted I-code, see column 4, lines 50-65) to obtain a third product, wherein the third of the plurality of signal samples (Fig. 17, I3) succeeds the second of the plurality of signal samples;

a fourth multiplier (Fig. 11, 1110-4) coupled to the switch for multiplying the selected portion of a fourth of the plurality of signal samples (Fig. 17, I4) with a third of the plurality of PN code chips (shifted PN code, see column 4, lines 50-65) to obtain a fourth product, wherein the fourth of the plurality of signal samples succeeds the third of the plurality of signal samples and wherein the third of the plurality of PN code chips succeeds the second of the plurality of PN code chips (shifted PN code, see column 4, lines 50-65), wherein the PN code is shifted such that

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correlations are obtained between each sample and each PN code chip, see column 4, line 66- column 5, line 4);

a second adder (Fig. 11, 1111-4) coupled to the third multiplier and the fourth multiplier for adding the third product with the fourth product to obtain a second sum; and

a third adder (Fig. 11, 1111-m) coupled to the first adder and the second adder for adding the first sum with the second sum.

Regarding claims 6, 8, and 10, the claimed method includes features corresponding to the above subject mentioned in the above rejection of claims 1, 3, and 5, which is applicable hereto.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawabe et al. (previously cited in Office Action 2/22/2006) in view of Langberg et al. (previously cited in Office Action 6/9/2004).

Regarding claims 16, 18, and 20, Kawabe et al. discloses all of the subject matter as described in the previous rejection (see rejection of claims 1,3, and 5) except for the method written as a computer program product with a computer readable storage medium.

However, Langberg et al. teaches that the method and apparatus for a transceiver warm start activation procedure with precoding can be implemented in software stored in a computer-readable medium. The computer readable medium is an electronic, magnetic, optical, or other physical device or means that can contain or store a computer program for use by or in connection with a computer-related system or method (note column 3, lines 51-65). One skilled in the art at the time the invention was made would have clearly recognized that the method of Kawabe et al. would have been implemented into software. The implemented software would perform the same function of the hardware for less expense, greater adaptability, and greater flexibility. Therefore, it would have been obvious to have implemented the method as taught by Kawabe et al. into software in the same manner as taught by Langberg et al. (with regards to the computer readable medium) in order to reduce cost and improve the adaptability and flexibility of the communication system.

Allowable Subject Matter

6. Claims 21, 22, 25, 26, 33 and 34 allowable over prior art references because related references do not disclose selecting one of the in-phase or quadrature phase portions of a signal, selecting one the even or odd sample of the signal, and multiplying the selected portion of the selected sample with a PN code.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Curtis Odom
September 8, 2006



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